

ZyAIR G-4100 v2 ( includes 1 pcs SP-200E Ticket Printer)  
Part no 91-005-152001B



IP Plug and Play Zero Configuration Wireless Hot-Spot Solution

- Performance**

  - 802.11b/g 2.4Ghz 11/54Mbit supported: Yes
  - Maximum simultaneously clients connected: 100

**Coverage**

(lab tested values, actual coverage and performance depends on customer location. Site survey recommended at customer premise before guaranteeing coverage and performance)

  - 802.11b/g: Indoor 100 m, Outdoor 300 m

**Networking Functions**

  - Various WAN Connections: Static IP, DHCP Client, PPPoE, PPTP
  - NAT (Network Address Translation) support
  - NTP (Network Time Protocol) support
  - DHCP Server / DHCP Relay
  - Transparent HTTP Proxy
  - DNS redirection
  - Outgoing SMTP Server redirection
  - RADIUS Server support
  - Syslog Server support
  - Share function, allow to share internal resources like a printer, so that connected clients can print
  - Bandwidth control, equal amount to all clients

**User Authentication and Accounting**

  - Support for 100 concurrent users
  - Web-based authentication
  - Idle-timeout control

**Billing**

  - Two account options: Time-to-Finish or Accumulated
  - Credit Card Payment through Payment Gateways

**Security**

  - WEP support 64/128 bit
  - WPA/WPA2 Personal, Mix and Enterprise
  - Intra-BSS Traffic Blocking
  - Layer 2 Isolation
  - SSL secured Login page and administration
  - IPsec, PPTP and L2TP VPN Pass-Through support
  - IP and MAC Address Pass-Through support
- Administration**

  - Internal User Database
  - Radius Server Support
  - SNMP version 2c
  - Web/TFTP firmware upgrade and configuration backup and restore
  - Web and Command Line Interface (CLI): Yes

**Marketing cooperation**

  - Custom Log-in page
  - Log-in page redirect
  - Portal page redirect
  - Advertisement URL link
  - Walled garden

**Antenna**

  - Two 2dBi 2,4 Ghz omni-directional Antennas, right is for send/receive, left receives only

**Connectivity**

  - 10/100TX ports, 1x WAN, 4x LAN
  - 802.3af PoE Support: Yes
  - Antenna connector: Reverse SMA

**Hardware**

  - Dimensions: 213 (W) x 139 (D) x 52 (H) mm
  - Operating Temperature: 5°C - 50°C
  - Max power consumption: 18 watt

**Warranty**

  - 2 years warranty

**Extra SP-200E Ticket Printer**  
Part no 67-010-410001B

  - Three configurable buttons
  - Web interface to configure IP address, encryption etc
  - Firmware upgradable
  - Proprietary PoE Support, please use ZyXEL PoE-12 Injector part no 91-005-116001B

Extra Paper Rolls (5 pcs): part no 65-099-040002-5

Security for Wireless and Wired Clients

Layer 2 isolation function enables every wireless and wired LAN client to be not able to communicate with each other even if they are on the same subnet. That is the best solution for Hotspot security.

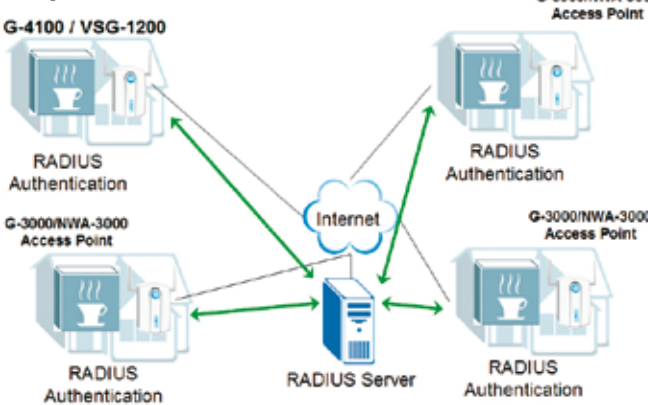


Zero Configuration Plug and Play Internet Access

No matter how the Clients network settings are configured, our HotSpot solutions will provide Internet access without any re-configuration of the network settings on the client computer.



Many locations, one solution



VSG-1200 v2

Part no 91-011-009001B



Internet Access Service Gateway

- Performance**

  - Maximum simultaneously clients connected: **1024**
  - Maximum Throughput: **72 Mbps**
  - Maximum numbers of sessions: **16384**

**Networking Functions**

  - Various WAN Connections: Static IP, DHCP Client, PPPoE, PPTP
  - NAT (Network Address Translation) support
  - NAT for VPN support (IPsec/PPTP)
  - NTP (Network Time Protocol) support
  - DHCP Server / DHCP Relay
  - **Static Route**
  - Transparent HTTP Proxy
  - DNS redirection
  - Outgoing SMTP Server redirection
  - RADIUS Server support
  - Syslog Server support
  - Share function, allow to share internal resources like a printer, so that connected clients can print
  - Bandwidth control, equal amount to all clients or **profile based for individual amount**

**User Authentication and Accounting**

  - Support for **1024** concurrent users
  - Web-based authentication
  - **Subscriber log-in**
  - **CAS (Hilton Group Proprietary)**
  - Idle-timeout control
  - **Privileged User account**
  - **Static / Dynamic accounting**
  - **Global Roaming support**

**Billing**

  - Two account options: Time-to-Finish or Accumulated
  - Credit Card Payment through Payment Gateways
  - **Port location Mapping**

**PMS Integration**

  - Supports Micro Fidelio Protocol , Spectrum MKII, Marriott and proprietary
  - Supports 802.1q Vlan tag infrastructure
- Security**

  - **Port based Vlan**
  - Layer 2 Isolation
  - SSL secured LogIn page and administration
  - PPTP and L2TP VPN Pass-Through support
  - IP and MAC Address Pass-Through support
  - **802.1x** Pass-Through support

**Administration**

  - Internal User Database
  - **Authorized Remote Management**
  - **Session Trace**
  - Radius Server Support
  - SNMP version 2c
  - Web/TFTP firmware upgrade and configuration backup and restore
  - Web and Command Line Interface (CLI): Yes

**Marketing cooperation**

  - Custom Log-in page
  - Log-in page redirect
  - Portal page redirect
  - Advertisement URL link
  - Walled garden

**Connectivity**

  - 10/100TX ports, 1x WAN, 1x LAN
  - 2x RS232 DB9 Female for Console and PMS application

**Hardware**

  - Dimensions: 440 (W) x 116 (D) x 44 (H) mm
  - Operating Temperature: 0°C - 50°C
  - Max power consumption: 10 watt

**Warranty**

  - 2 years warranty



All specifications are subject to change without notice.

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**Partner support** (only for registered business partners)  
can be reached at the following dedicated telephone  
number or by e-mail:

Tel (+45) 39 55 07 88 or partnersupport@zyxel.dk

Partner support available business hours 9 - 16

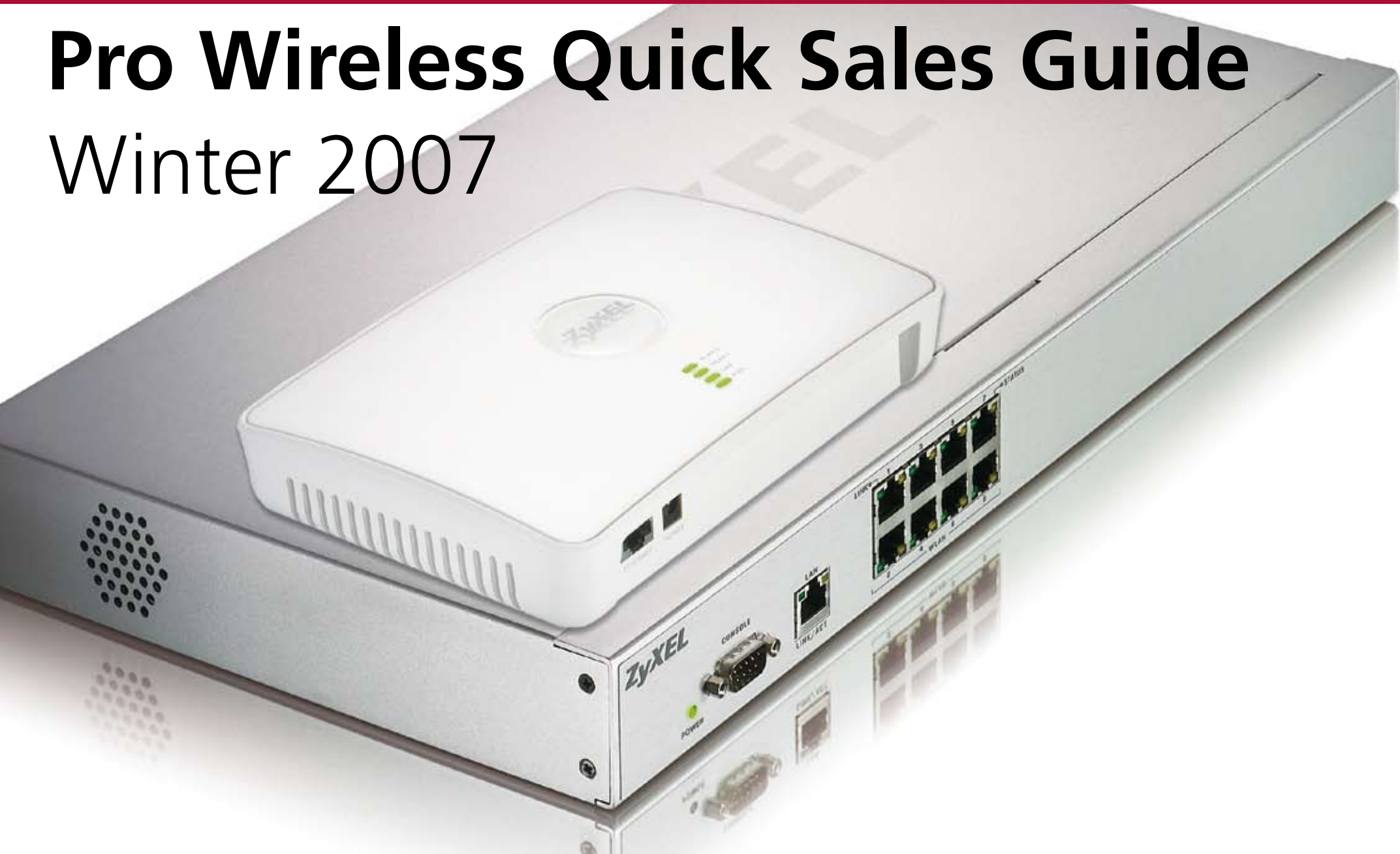
End User support:

Tel (+45) 39 55 07 85 or support@zyxel.dk

End-User support available business hours 9 - 20

# Pro Wireless Quick Sales Guide

## Winter 2007





# Small Medium Enterprise

## NWA-3100

Part no 91-005-161001B



### Single-radio 802.11A or B/G

#### Performance

- 802.11b/g 2.4Ghz 11/54Mbit supported: Yes
- 802.11a 5Ghz 54Mbit supported: Yes
- Maximum simultaneously clients connected: 132

#### Coverage

[Lab tested values, actual coverage and performance depends on customer location. Site survey recommended at customer premise before guaranteeing coverage and performance]

- 802.11b/g: Indoor 100 m, Outdoor 400 m
- 802.11a: Indoor 80 m, Outdoor 200 m

#### Wireless Distribution System (WDS)

- Access Point and Bridge simultaneously: Yes
- Repeater: Yes
- Point to Point Bridging: Yes
- Point to Multi-Point Bridging: Yes
- Spanning Tree (STP) / RSTP Support: Yes / Yes

#### Quality of Service (QoS)

- Roaming: Yes
- Roaming IAPP 802.11f: Yes
- Roaming IAPP 802.11f with PMK-cache and pre-authentication support for fast-roaming: Yes
- Vlan and Management Vlan support: Yes
- Multiple SSID support: Yes, 8
- Predefined optimized VoIP & Guest SSID: Yes
- WMM (WiFi MultiMedia): Yes
- WMM+ATC (Auto Traffic Classifier): Yes
- Prioritization for non-WMM applications: Yes
- Type of Service (ToS) and DiffServ: Yes

#### Security

- WEP support 64/128/152 bit: Yes
- WPA/WPA2 Personal, Mix and Enterprise: Yes
- Dynamic WEP Key Exchange: Yes
- 802.1x (EAP-TLS, EAP-TTLS, PEAP, SIM): Yes
- WDS encryption: TKIP / AES
- MAC Address Filtering through Wlan: Yes
- Intra-BSS Traffic Blocking: Yes
- Layer 2 Isolation: Yes
- Multiple Layer 2 Isolation profiles: Yes
- Rogue Access Point Detection: Yes

#### Administration

- Internal Radius Server: No
- Radius Server Support: Yes
- Centralized Administrator Account through Radius Server: Yes
- DHCP Client: Yes
- Syslog Server Support: Yes
- SNMP Support: Yes, version 2c
- IPsec, PPTP and L2TP Pass-Through Support: Yes
- Web/FTP/TFTP firmware upgrade and configuration backup and restore: Yes
- Text File Based Auto Configuration of one or multiple Access Points: Yes
- Web and Command Line Interface (CLI): Yes

#### Antenna

- Two 2dBi 2.4 Ghz/5Ghz omni-directional Antennas, right sends/receives, left receives only

#### Connectivity

- 802.3af PoE Support: Yes
- Antenna connector: Reverse SMA

#### Hardware

- Dimensions: 92 [W] x 152 [D] x 45 [H] mm
- Operating Temperature: 0°C - 50°C
- Max power consumption: 18 watt

#### Warranty

- 2 years warranty

## NWA-3160

Part no 91-005-197001B



### Single-radio 802.11A or B/G Plenum Rated, UL2043 compliant

#### Performance

- 802.11b/g 2.4Ghz 11/54Mbit supported: Yes
- 802.11a 5Ghz 54Mbit supported: Yes
- Maximum simultaneously clients connected: 132

#### Coverage

[Lab tested values, actual coverage and performance depends on customer location. Site survey recommended at customer premise before guaranteeing coverage and performance]

- 802.11b/g: Indoor 100 m, Outdoor 400 m
- 802.11a: Indoor 80 m, Outdoor 200 m

#### Wireless Distribution System (WDS)

- Access Point and Bridge simultaneously: Yes
- Repeater: Yes
- Point to Point Bridging: Yes
- Point to Multi-Point Bridging: Yes
- Spanning Tree (STP) / RSTP Support: Yes / Yes

#### Quality of Service (QoS)

- Roaming: Yes
- Roaming IAPP 802.11f: Yes
- Roaming IAPP 802.11f with PMK-cache and pre-authentication support for fast-roaming: Yes
- Vlan and Management Vlan support: Yes
- Multiple SSID support: Yes, 8
- Predefined optimized VoIP & Guest SSID: Yes
- WMM (WiFi MultiMedia): Yes
- WMM+ATC (Auto Traffic Classifier): Yes
- Prioritization for non-WMM applications: Yes
- Type of Service (ToS) and DiffServ: Yes

#### Security

- WEP support 64/128/152 bit: Yes
- WPA/WPA2 Personal, Mix and Enterprise: Yes
- Dynamic WEP Key Exchange: Yes
- 802.1x (EAP-TLS, EAP-TTLS, PEAP, SIM): Yes
- WDS encryption: TKIP / AES
- MAC Address Filtering through Wlan: Yes
- Intra-BSS Traffic Blocking: Yes
- Layer 2 Isolation: Yes
- Multiple Layer 2 Isolation profiles: Yes
- Rogue Access Point Detection: Yes

#### Administration

- Internal Radius Server: **Yes, up to 128 users**
- Radius Server Support: Yes
- Centralized Administrator Account through Radius Server: **Yes**
- DHCP Client: Yes
- Syslog Server Support: Yes
- SNMP Support: Yes, version 2c
- IPsec, PPTP and L2TP Pass-Through Support: Yes
- Web/FTP/TFTP firmware upgrade and configuration backup and restore: Yes
- Text File Based Auto Configuration of one or multiple Access Points: Yes
- Web and Command Line Interface (CLI): Yes

#### Antenna

- Two 2dBi 2.4 Ghz/5Ghz omni-directional Antennas, right sends/receives, left receives only

#### Connectivity

- 802.3af PoE Support: Yes
- Antenna connector: Reverse SMA

#### Hardware

- Dimensions: 199 [W] x 139 [D] x 47 [H] mm
- Operating Temperature: 0°C - 50°C
- Max power consumption: 18 watt

#### Warranty

- 2 years warranty

## NWA-3500

Part no 91-005-154001B



### Dual-radio 802.11A/B/G simultaneous

#### Performance

- 802.11b/g 2.4Ghz 11/54Mbit supported: Yes
- 802.11a 5Ghz 54Mbit supported: Yes
- Maximum simultaneously clients connected: 132

#### Coverage

[Lab tested values, actual coverage and performance depends on customer location. Site survey recommended at customer premise before guaranteeing coverage and performance]

- 802.11b/g: Indoor 100 m, Outdoor 400 m
- 802.11a: Indoor 80 m, Outdoor 200 m

#### Wireless Distribution System (WDS)

- Access Point and Bridge simultaneously: Yes
- Repeater: Yes
- Point to Point Bridging: Yes
- Point to Multi-Point Bridging: Yes
- Spanning Tree (STP) / RSTP Support: Yes / Yes

#### Quality of Service (QoS)

- Roaming: Yes
- Roaming IAPP 802.11f: Yes
- Roaming IAPP 802.11f with PMK-cache and pre-authentication support for fast-roaming: Yes
- Vlan and Management Vlan support: Yes
- Multiple SSID support: Yes, 16
- Predefined optimized VoIP & Guest SSID: Yes
- WMM (WiFi MultiMedia): Yes
- WMM+ATC (Auto Traffic Classifier): Yes
- Prioritization for non-WMM applications: Yes
- Type of Service (ToS) and DiffServ: Yes

#### Security

- WEP support 64/128/152 bit: Yes
- WPA/WPA2 Personal, Mix and Enterprise: Yes
- Dynamic WEP Key Exchange: Yes
- 802.1x (EAP-TLS, EAP-TTLS, PEAP, SIM): Yes
- WDS encryption: TKIP / AES
- MAC Address Filtering through Wlan: Yes
- Intra-BSS Traffic Blocking: Yes
- Layer 2 Isolation: Yes
- Multiple Layer 2 Isolation profiles: Yes
- Rogue Access Point Detection: Yes

#### Administration

- Internal Radius Server: **Yes, up to 128 users**
- Radius Server Support: Yes
- Centralized Administrator Account through Radius Server: Yes
- DHCP Client: Yes
- Syslog Server Support: Yes
- SNMP Support: Yes, version 2c
- IPsec, PPTP and L2TP Pass-Through Support: Yes
- Web/FTP/TFTP firmware upgrade and configuration backup and restore: Yes
- Text File Based Auto Configuration of one or multiple Access Points: Yes
- Web and Command Line Interface (CLI): Yes

#### Antenna

- Two 2dBi 2.4 Ghz/5Ghz omni-directional Antennas, one per radio

#### Connectivity

- 802.3af PoE Support: Yes
- Antenna connector: Reverse SMA

#### Hardware

- Dimensions: 139 [W] x 213 [D] x 52 [H] mm
- Operating Temperature: 0°C - 50°C
- Max power consumption: 26 watt

#### Warranty

- 2 years warranty

# Wireless LAN Controller System

## NXC-8160

Part no 91-005-176001B



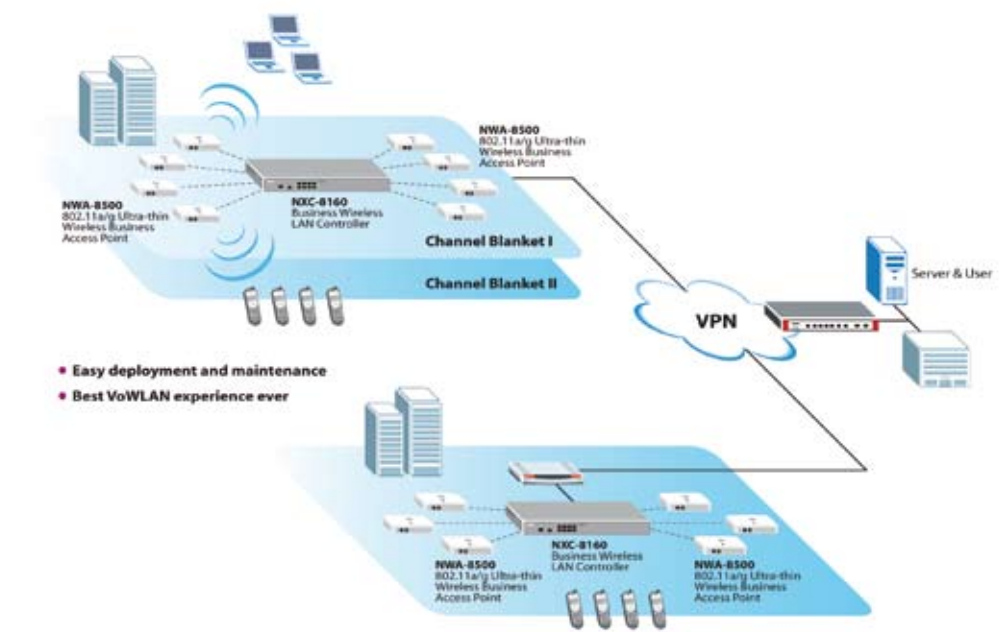
### Wireless LAN Controller with PoE support for NWA-8500 Ultra-Thin Access Points

The NXC-8160 Wireless LAN Controller is a central component of ZyXEL unique Interference-Free architecture.

The unique solution enables the same channel to be transmitted from every access point in the system, without the co-channel interference that plagues other WLAN solutions. By forming such "Channel Blankets", the need for RF cell planning is eliminated, and the traditional site survey is simply reduced to a matter of physical equipment installation planning. This, coupled with Zero-configuration access points that are placed in any density and unrestricted by RF conditions, delivers truly plug and play simplicity.

Furthermore, ZyXEL's unique centralized control of each channel blanket means a WLAN system with Zero-delay mobility, robust client connections, the ability to design for a guaranteed level of user throughput, and higher aggregate bandwidth than comparable WLAN systems.

Simply said, it provides the flexibility, performance, and simplicity that enterprise need to support data, video, and voice (VoWLAN) application in ubiquitous WLAN deployments.



## NWA-8500

Part no 91-005-175001B



### Dual-radio 802.11A/B/G simultaneous

The NWA-8500 802.11a/g Ultra Thin Wireless Business Access Point is a high performance dual 802.11a/b/g Wireless Access Point that cooperate with NXC-8160. The new non-invasive design is best suitable for deployment in business environment. The true Plug and Play AP does not need any configuration at all makes NWA-8500 the easiest deploying high performance Business Access Point of its category. Receives PoE power directly from the NXC-8160 Wireless LAN Controller.

#### Hardware

- Dimensions: 198.5 [W] x 139 [D] x 48 [H] mm
- Operating Temperature: 0°C - 50°C
- Max power consumption: 16 watt

#### Warranty

- 2 years warranty

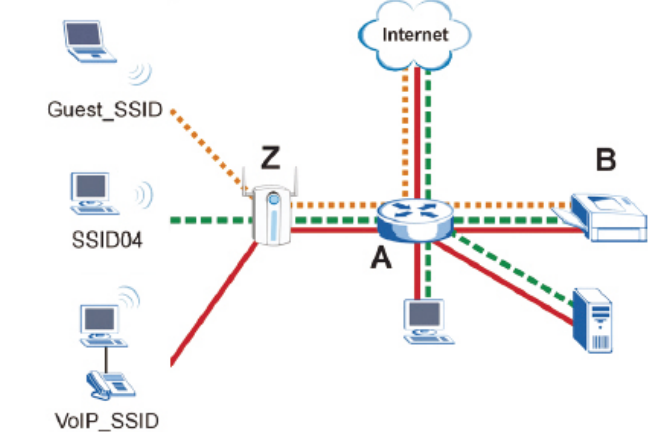
### Wireless LAN Infrastructure

Traditionally, you need to use different AP's to configure different SSID's. As well as the cost of buying extra AP's, there is also the possibility of channel interference. Using ZyXEL's Multiple SSID feature this function allows you to use one AP to provide multiple SSID's simultaneously. You can configure security settings individually for each SSID, thus being able to provide an intelligent solution to the customer, where users individually can move around in the office while his security settings are applied from AP to AP.



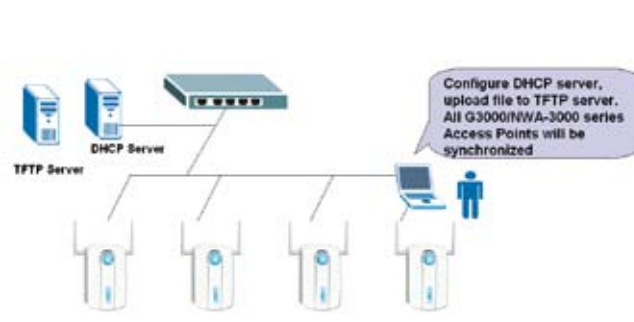
### Predefined optimized SSID profiles

The NWA-3000 series Access Points is shipped with predefined optimized SSID profiles, making it very simple to setup and configure advanced features like Guest SSID and VoIP SSID.



### Text File Based Auto Configuration

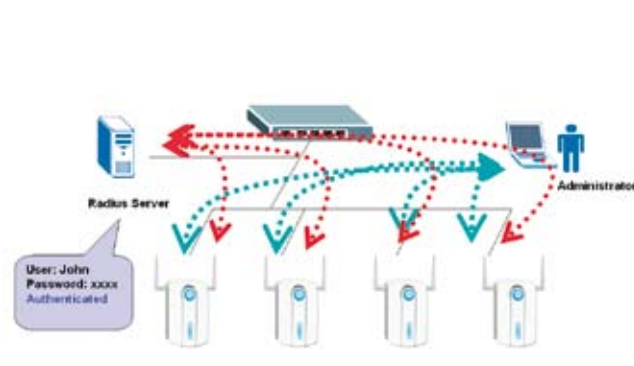
All G-3000/NWA-3000 series Access Points supports easy deployment of several Access Points at the same time. Using ZyXEL's advanced configuration possibility, administrators can now by using a DHCP server and a TFTP server use setup option 66 (TFTP Server) and option 67 (Boot file), configure one Access Point and then synchronize the configuration file to all other Access Points, eliminating the tedious process of manually configuring one Access Point at a time.



### Centralized Administrator Account

Using the centralized ZyXEL Administrator Account feature the administrator is allowed to specify an account on a RADIUS server to become the administrator account for all NWA-3000 series Access Points, simplifying administration of multiple access points significantly.

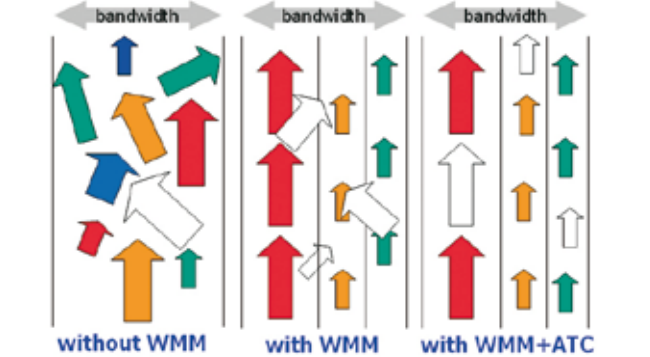
One example could be that it now is possible to enforce the users password policy, change password every 45 days.



### Quality of Service

WMM (Wi-Fi MultiMedia) Quality of Service ensures quality of service in wireless networks. It controls WLAN transmission priorities according to the delivery requirements of the individual and applications. On AP's without WMM QoS, all traffic streams are given the same priority to the wireless network. If the introduction of another traffic stream creates a data transmission demand that exceeds the current network capacity, then the new traffic stream reduces the throughput of the other traffic streams.

ZyXEL's Pro Wireless AP's uses WMM QoS to prioritize traffic streams according to the VLAN or DSCP information in each packet's header. The ZyXEL AP automatically determines the priority to use for an individual traffic stream. This prevents reductions in data transmission for applications that are sensitive to latency (delay) and jitter (variations in delay). WMM must be supported on the client to have any effect.



### ZyXEL's Automatic Traffic Classifier

Only by using ZyXEL's advanced Automatic Traffic Classifier (ATC), users will experience true wireless Quality of Service. **No need for client support**, this system works like a bandwidth management tool that prioritizes packets sent across the network. ATC assigns each packet a priority and then queues the packet accordingly. Packets assigned a high priority are processed more quickly than those with low priority. If there's congestion, allowing time-sensitive applications to flow more smoothly. Time-sensitive applications includes both those that requires a low level of latency and a low level of jitter such as Voice over IP or Internet gaming, and those for which jitter alone is a problem such as Internet Radio or streaming video.

